

## Adverse Network Events Solution

*Avoid adverse network events with predictive analytics and machine learning*

### Benefits

- Increase railcar and system velocity
- Achieve PSR and Operating Ratio goals
- Improve ability to plan and execute
- Conserve fuel

### What Kinds of Events?

- Stalls and Stops
- Separations
- Derailments (human factor and rail equipment)
- Blocked crossings
- Subcategories of these and more

### How the Solution Works

#### Predict Events



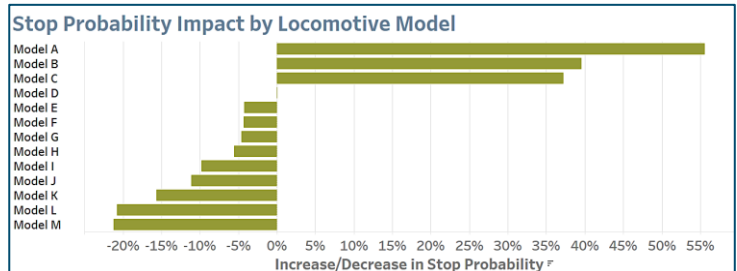
- Identify future events with high likelihood potential
- Focus on **daily operations** vs. planning

#### Attribute Cause



- Understand causal factors and their relative contributions to events
- Focus on **planning** vs daily operations

Train Identifier	Date	Origin	Destination	Stop Probability	
IS23400	1/29/2020	Terminal 6	Terminal 17	6.2%	Descending Order
IS88391	1/29/2020	Terminal 23	Terminal 14	5.8%	
MM489	1/29/2020	Terminal 17	Terminal 9	4.2%	
JM4889	1/29/2020	Terminal 33	Terminal 9	3.8%	



### We Solve Complex Business Challenges

First Analytics designs and implements predictive analytics and machine learning solutions.

We span multiple industries and applications.

With an enabling engagement model, we team up with our clients to build their in-house capabilities and systems.

